

TIG IP Policy

Introduction

The TIG Foundation believes that open collaboration is the best way to achieve high quality, robust innovation because collaboration done in the open provides access to the innovation process for all talent, increases scrutiny, reduces duplication, and transparently rewards according to merit. It is therefore important that The TIG Foundation ensures that the innovation resulting from The Innovation Game is made available through a channel which aspires to meet an objective standard of openness which allows open collaboration to flourish.

The TIG Foundation believes that important innovation resulting from pre-commercial research is not always fairly rewarded for the foundational contribution that it makes to downstream commercial products. The TIG Foundation therefore seeks to capture some of the value from that downstream commercialisation and allocate it to reward the pre-commercial research communities; we call this “*Science Funding Science*”.

Foundation Objectives

The TIG Foundation has as its objectives:

- (i) The fostering of **open collaboration**;
- (ii) **The creation of a synthetic market** for early-stage and fundamental (typically pre-commercial) research to **allocate funds efficiently to market contributors**; and
- (iii) The reconciliation of the apparently conflicting objectives of, on the one hand, **open collaboration** and on the other, **value capture** from enterprises that commercially exploit the innovation resulting from such collaboration.

The TIG IP Policy seeks to apply intellectual property rights to further these objectives.

Licensing

To enable open collaboration, The TIG Foundation will always make implementations of algorithms submitted to The TIG Foundation available under a licence that aspires to meet objective standards of openness. Because of that openness, for The TIG Foundation to achieve its vision of “*Science Funding Science*”, a multi-license strategy is required to enable value to be captured from the commercial use of those implementations.

Under a multi-license strategy, the TIG Foundation will manage implementations and related intellectual property under two categories of license agreement; **(i)** Licenses related

to participation in The Innovation Game; and **(ii)** Licenses related to distribution and use of implementations outside of The Innovation Game.

Game Licenses

1. **The TIG Innovator Outbound Game Licence:** A licence which will gateway access to implementations previously submitted to The Innovation Game for use by innovators who wish to use those implementations to participate in The Innovation Game.
2. **The TIG Benchmarker Outbound Game Licence:** A licence which will gateway access to implementations previously submitted to The Innovation Game for use by benchmarkers who wish to use those implementations to participate in The Innovation Game.
3. **The TIG Inbound Game Licence:** A licence which will gateway submissions of new implementations to The Innovation Game and which, in conjunction with the TIG Game Rules, will enable the TIG Foundation to secure Intellectual Property rights in the innovation resulting from participation in The Innovation Game.

Innovation Distribution Licenses

4. **The TIG Open Data Licence:** A licence which will aspire to meet objective standards of openness for code and data, and which will include a **share alike obligation**.

The *TIG Open Data License* will require that if data (including implementations thereof) generated by execution of the subject algorithm implementation (“**Output Data**”) on certain input data is made available to third parties as data or in the form of a product derived from the data, then the input data processed by execution of the implementation to generate the Output Data together with any additional information to generate a product derived therefrom must also be made **generally available** to the extent necessary to allow a reproduction of the Output Data or product as the case may be (such input data hereinafter referred to as “**Relevant Data**”).

The share alike obligation will require that; **(i)** where the subject algorithm implementation alone is distributed, the source code for the implementation must be made available under the TIG Open Data License **to the recipient** of the algorithm implementation; and **(ii)** where Output Data is distributed, the source code for the implementation and the Relevant Data must be made **generally available** for distribution under the TIG Open Data License.

5. **The TIG Commercial Licence:** A licence which will allow closed use of the implementation and Relevant Data in return for the payment of a fee (non-discriminatory, means tested and rate card based) which will be used to underpin value in The Innovation Game incentives. In contrast with the TIG Open Data License,

The TIG Commercial License will provide greater freedom with respect to downstream licensing and will not impose an obligation to make data available.

GAME LICENSES

Outbound

TIG Innovator Outbound Game License

Objectives

- To provide rights to use TIG Foundation algorithm implementations in The Innovation Game only as the starting point for further innovation for submission to the TIG Foundation as part of The Innovation Game.

- *THIS MUST BE THE LICENCE YOU CHOOSE IF YOU WANT TO:*

PARTICIPATE IN THE INNOVATION GAME TO EARN TIG TOKENS AS AN INNOVATOR USING ALGORITHMS FROM THE TIG REPOSITORY.

THERE IS NO FEE FOR USE OF IMPLEMENTATIONS UNDER THE TIG INNOVATOR OUTBOUND GAME LICENSE IN THE INNOVATION GAME AND THE LICENCE CREATES NO OBLIGATION TO SHARE DATA.

TIG Benchmarker Outbound Game License

Objectives

- To provide rights to use TIG Foundation algorithm implementations in The Innovation Game only for the purpose of benchmarking as part of The Innovation Game.

- *THIS MUST BE THE LICENCE YOU CHOOSE IF YOU WANT TO:*

PARTICIPATE IN THE INNOVATION GAME TO EARN TIG TOKENS AS A BENCHMARKER USING ALGORITHMS FROM THE TIG REPOSITORY.

THERE IS NO FEE FOR USE OF IMPLEMENTATIONS UNDER THE TIG BENCHMARKER OUTBOUND GAME LICENSE IN THE INNOVATION GAME AND THE LICENCE CREATES NO OBLIGATION TO SHARE DATA.

Inbound

Choice of Inbound Licenses

Objectives

- To facilitate outbound licensing which accords with the TIG IP Policy by limiting submissions to The Innovation Game to source implementations that are under licenses which are compatible with the TIG Inbound Game License, TIG Innovator Outbound Game License, TIG Benchmarker Outbound Game License, TIG Open Data License, and TIG Commercial License.
- To maximise patent leverage to avoid freeriding and ensure reward flows back to innovators.

Licenses which are not compatible with the TIG Licenses

Objective

- To exclude from submission to The Innovation Game, any implementations which are under license terms which are incompatible with any of the TIG Inbound Game License, TIG Innovator Outbound Game License, TIG Benchmarker Outbound Game License, TIG Open Data License, and TIG Commercial License. Excluded licenses would include any non-permissive Open Source licences.

Preference for Contributor Original Works

The TIG Foundation will accept pre-existing algorithm implementations submitted under license terms which are different from the TIG Inbound Game License but which are nevertheless compatible with the TIG licenses (typically these will be permissive style open source licenses such as MIT or BSD) but has a **preference*** for each algorithm and implementation of the algorithm submitted to be an original work of the entity making the submission which will allow; **(i)** the copyright to be licensed under the terms of the TIG Inbound Game License; and **(ii)** for underlying inventions to be assigned to The TIG Foundation so that any resulting patent rights can be leveraged by the TIG Foundation to prevent freeriding.

** [The effectiveness of sui generis Database rights, where they exist, are considered weak when applied to achieving copyleft effects and the copyright in the typically short code sequences used to express algorithms may be easily evaded by clean room reimplementations. For these reasons we wish to secure patent rights related to certain contributed algorithm implementations and accordingly we prefer assignment or, at least, licenses which give us the latitude to secure such rights.]*

Code which is submitted to TIG which is an original work in which the copyright is owned by the submitter, **must be submitted to TIG under the terms of the TIG Inbound Game License.**

Code which is not a work in which the copyright is owned by the submitter and which is received by the submitter under a license which does **not** permit relicensing under the

terms of the TIG Inbound Game License (e.g. Apache) **may only be submitted** to TIG under the terms of a Permissive License (where a “**Permissive license**” means any license agreement which is compatible with the terms of all of; **(i)** the TIG Game Outbound License; **(ii)** the TIG Open Data License; and **(iii)** the TIG Commercial License. (examples include MIT, BSD and Apache software licenses). A license shall be compatible with another license if code licensed under the original license can be merged with code licensed under the new license whilst still complying with the terms of the original license.

Code which is not a work in which the copyright is owned by the submitter, and which is received by the submitter under a Permissive License which permits relicensing under the terms of the TIG Inbound Game License (e.g. MIT and BSD), **must be submitted to TIG under the terms of the TIG Inbound Game License.**

TIG Inbound Game License

Objectives

- To secure contractual acceptance of The Innovation Game Rules by licensees.
- To ensure that code submitted to TIG is under a license that is compatible with the TIG licenses.
- In conjunction with the TIG Game Rules, to secure, where possible, assignment to The TIG Foundation of inventions related to the algorithm implementations submitted to The TIG Foundation.
- To provide reassurance that the submitted implementations will always be made available under the TIG Innovator Outbound License, TIG Benchmarker Outbound Game License, TIG Open Data License and TIG Commercial License.

- ***THIS MUST BE THE LICENCE YOU CHOOSE IF YOU WANT TO:***

***PARTICIPATE IN THE INNOVATION GAME AS AN INNOVATOR TO EARN TIG TOKENS.
ARE WILLING TO ASSIGN INVENTIONS ASSOCIATED WITH A NOVEL ALGORITHM THAT YOU OWN.***

INNOVATION DISTRIBUTION LICENSES

TIG Open Data Licence

Increasingly, code developed through open collaboration generates enormous value for certain users who contribute little back in return. Even for code under a copyleft license, a user may modify the code (tailoring it to their particular use case) use the code internally (e.g. to process various data) then distribute the output, without any obligation to share either the modified code or the data.

Examples of this type of activity range from large corporations who distribute the output as a product, to academic researchers who use Open Source programs to process experimental data, publish their results, but do not make the original data set available (making it far more difficult for anyone wishing to reproduce the researchers' results).

In order to address these challenges and more, we introduce the TIG Open Data License (TODL). The TODL is a license designed to increase freedom in both software and data processed using the software, areas which are becoming ever more intertwined.

Objective: *The TODL aims to address the above issues by requiring both code and input data to be made available when the output is shared.*

Main Challenges: *The strategy embodied in the TODL is somewhat analogous to the copyleft technique insofar as an input (source) is required to be made available when an output (target code) is distributed. However, our task is complicated by the general nature of the object to be made available: The input could be any sort of data, including source code, lists of (perhaps confidential) facts, copyrightable material or otherwise. Accordingly, unlike the principle of copyleft, we cannot rely on leveraging property rights such as copyright on the input, or even assume that the input can be made available whilst also meeting privacy requirements.*

Our strategy: *Challenges arising from the inability to reliably secure property rights on input data are addressed by leveraging property rights on the program code used to process the data. With respect to privacy, we propose to address this by requiring that synthetic versions of data sets be made available when the original data cannot be released for privacy reasons. Synthetic data retains much of the utility of the original data set for many purposes (including the training of machine learning models) while mitigating the risk to privacy.*

Objectives

- To enable and perpetuate open development of algorithms and their implementations.
- To enable and perpetuate open availability of Relevant Data.

○ ***THIS WOULD BE EXPECTED TO BE THE LICENSE YOU WOULD CHOOSE IF YOU WANTED TO:***

MAKE COMMERCIAL OR NON-COMMERCIAL USE OF THE IMPLEMENTATIONS OUTSIDE OF THE INNOVATION GAME.

DO NOT WANT TO PAY FOR A LICENSE.

ARE WILLING TO SHARE YOUR RELEVANT DATA.

THERE IS NO FEE FOR USE OF IMPLEMENTATIONS UNDER THE TERMS OF THIS LICENSE.

There is an incentive for innovation of algorithms available under the TIG Open Data License to be made available under the TIG Inbound Game license because the innovator may be able to earn tokens by participating in The Innovation Game whilst still having the assurance that their innovation will be made available under the TIG Open Data License (as required by the TIG Inbound Game License).

TIG Commercial Licence

Objectives

- To allow algorithm implementations and optimisations created by the licensee to be kept closed.
- To allow algorithm implementations and optimisations created by the licensee to be used to process licensee data whilst allowing Relevant Data to be kept closed.
- To allow distribution in binary code form with licensee product (where such licensee product contributes significant additional features or functionality) and only under the same licensing terms as the licensee product.
- To limit distribution of the source code to distribution under the TIG Inbound Game License and TIG Open Data License.
- To allow algorithm implementations to be used by licensee for processing third party data provided to it by other TIG Commercial Licensees interacting with licensee remotely through a computer network.
- To secure consideration (non-discriminatory, means tested and rate card based) for the exploitation of the TIG algorithm implementations to underpin rewards in The Innovation Game.

- ***THIS WOULD BE EXPECTED TO BE THE LICENSE YOU WOULD CHOOSE IF YOU WANTED TO:***

***MAKE COMMERCIAL OR NON-COMMERCIAL USE OF THE IMPLEMENTATIONS OUTSIDE OF THE INNOVATION GAME.
YOU WANT TO KEEP YOUR ALGORITHM IMPLEMENTATIONS AND/OR RELEVANT DATA PRIVATE.
ARE PREPARED TO PAY FOR A LICENSE.***

License Summary

Outbound Licence Type	Fee	Share Alike	Onward License	Open Data Obligation
GAME LICENSES				
TIG Innovator Outbound Game Licence	No	No	<ul style="list-style-type: none"> • TIG Inbound Game License 	No
TIG Benchmarker Outbound Game Licence	No	Not applicable	Not applicable	No
TIG Inbound Game License	No	No	TIG undertakes to make available under: <ul style="list-style-type: none"> • TIG Innovator Outbound Game License • TIG Benchmarker Outbound Game License • TIG Open Data License • TIG Commercial License 	No

DISTRIBUTION LICENSES				
TIG Open Data Licence	No	Yes	<ul style="list-style-type: none"> • TIG Open Data License only 	Yes
TIG Commercial Licence	Yes	No	<ul style="list-style-type: none"> • TIG Inbound Game License • TIG Open Data License 	No

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